

Each superior maxilla in the young skull extended to $2\frac{1}{2}$ inches from the tip of the beak where it terminated as a slender bar of bone. In both crania it expanded posteriorly, and, overlapping the frontal bone, ascended to the vertex behind the præmaxilla. The anterior surface of its cranial expansion was concave, and the hollow was somewhat deeper in the adult than in the young specimen. In the young a large single foramen was in the right bone almost on a line with the præmaxillary foramina, but in the left bone were two foramina. In the adult four foramina, one of which was partially subdivided, were in the right bone, but only two in the left. In both skulls a large foramen, directed outwards, opened in the expanded cranial portion, on a line with the middle of the anterior nares. An ectomaxillary ridge was present in both crania, but in neither so prominent as in *Mesoplodon sowerbyi*. In the adult the ectomaxillary groove, and the buttress-like projection of the pterygoid and superior maxilla, closely resembled Owen's description of the original skull in the British Museum. In the younger skull, whilst this groove was marked at the base of the rostrum, it disappeared in the anterior two-thirds, whilst neither the pterygoid nor superior maxilla swelled out to form a "buttress," so that instead of the massive piece of bone seen in the adult swelling out laterally beyond the margin of the ectomaxillary ridge, in the young, but a faint elevation occurred, and the ectomaxillary ridge formed the most prominent feature in the outline of this part of the beak. In both crania, as well as in *Mesoplodon sowerbyi*, the antorbital notch was separated from the base of the ectomaxillary ridge by an intermediate maxillary tubercle.

The palatal surface of the beak flattened anteriorly in the adult, but slightly concave in the younger skull was formed by the præmaxillæ, which passed backwards between the anterior ends of the superior maxillæ, to articulate with the mesial palatal part of the vomer. In the adult, the middle and posterior parts of this surface were much more convex than in the young skull, and the sutures were almost entirely obliterated. In the younger skull, the palatine plates of the two palate bones appeared as narrow triangles between the diverging anterior ends of the two pterygoids, and separated them from the superior maxillæ; but these plates did not articulate with each other mesially as in *Mesoplodon sowerbyi*; for the superior maxillæ were prolonged backwards between them in order to articulate with the interpterygoid part of the vomer which appeared on the surface in this locality. In the adult, the palate plate of the palate bone was absent, so that the pterygoid articulated directly with the superior maxilla. Both in the adult and younger crania the palate bone passed backwards and outwards on the side of the beak, between the pterygoid and superior maxilla, so as to come into proximity with the malar bone.

Each pterygoid was a triangular plate of bone, concave externally, and with its lower border everted so as to constitute the lower boundary of a pterygoid fossa; a deep notch directed upwards and forwards was situated in the base of each plate. The two ptery-